Safe Rooms in the Floodplain

We have tornadoes in Kansas and people are rightfully concerned about safety when it comes to tornadoes. Problems arise when property owners place storm shelters in the floodplain.

A common type of shelter is one that looks like a cement vault with a door at ground level. The floor of this type of shelter will be several feet below ground. The shelter has walls and a roof on it. This makes the shelter a structure by the NFIP definition. It must meet the requirements of any other non-residential structure in the floodplain as spelled out in the community floodplain regulations.

There must be a local floodplain permit on file. The shelter may require a fill permit from the Division of Water Resources (DWR). It must have a non-residential flood proofing certificate signed off on by an engineer or architect. The flood proofing is difficult to prove if the door is below the Base Flood Elevation (BFE). Flood proofing also requires maintenance plans, emergency operation plans, complex calculations, and other things that are not so simple for a storm shelter.

There are also safe rooms that are installed in garages. One option looks like a pit in the floor with a heavy metal door over it. Parking or storage is cleared to access the pit. This is not a good option because it would easily fill with water during a flood. Many of the same storms that cause tornadoes come with heavy rain. There is a version that looks like a large metal box that is bolted to the floor of the garage. This version changes the use of the garage and causes its own permitting issues.

Above ground safe rooms can be elevated on a fill pad to raise the floor to a level that complies with community regulations. Another option is to add a safe room inside of the existing home. If the work is not a substantial improvement, then modifications to add a safe room to the interior of a building can be done without permit restrictions. This is much easier to do for new construction than for an existing home.

Floodplain Managers should work with property owners to choose, design, and site a safe room that will be safe from both tornadoes and floods, meet permitting requirements and protect the citizens from disasters. The Federal Emergency Management Agency (FEMA) publication P-320 “Taking Shelter from the Storm” contains information on building a safe room for a home or small business. The FEMA Quick Guide on Flood Hazard Elevation and Siting Criteria for Residential Safe Rooms (2015) and FEMA Fact Sheet on Residential Tornado Safe Room Doors (2018) will be sent out with the email version of this issue of Floodplain Tips. Region 7
FEMA staff is also offering a virtual two half-day training on “Design and Construction Guidance for Safe Rooms Workshop” using FEMA publication P-361, “Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms” (2021) On October 21st and 22nd. Find our training page at the end of this issue or on our website for more information and to register.

**KAFM Conference 2021**

On September 1-2, the Kansas Association of Floodplain Managers held their conference in Mulvane. Attendees enjoyed presentations given by a variety of presenters. Daniel Curley of AECOM presented on “New Tools for Local Flood Risk Assessment in Kansas” which centered around new and enhanced modeling products. DWR presented on Statewide BLE Data Initiative as well as how to file for LiDAR-Based LOMAs and the BFE Portal website. This generated a great deal of interest for floodplain managers. Steve Samuelson presented on NFIP basics, which was attended by new floodplain managers, adjacent professionals new to floodplain management, as well as experienced individuals in need of a refresher course. Engineering experts, such as Joe File of Wood presented on “Correlation of BLE Input Parameters and Calibration”, and Brian Rast of USACE on “Rossville Flood Solutions”. The conference featured several policy-oriented speakers such as Erin Cobb of FEMA presenting on “Agriculture Structure Policies”, and Todd Tucker of FEMA presenting on “NFIP and the Endangered Species Act”.

The evening of the first day, attendees enjoyed a demonstration by Kansas strongman, Brad Johnson of Haysville, who holds multiple world records. A social hour where many were meeting for the first time since the pandemic and postponement of last year’s conference preceded dinner. On the second day of the conference, those who had received their Certified Floodplain Manager certification since the postponement received their CFM pins. The 2022 KAFM Conference will be held September 7-8 at the Double Tree in Lawrence.
Bill Pace, DWR receives CFM pin

Ryan Hvitlok, City of Hutchinson receives CFM pin

Brad Johnson, Strongman of Haysville

Michal Alldritt presents on LOMAs and Elevation Certificates

DWR presents on LiDAR-Based LOMAs

KAFM Meet and Greet
Training Opportunities

**Design and Construction Guidance for Safe Rooms Workshop**
The Federal Emergency Management Agency (FEMA), Kansas Department of Agriculture, Division of Water Resources, and FEMA Region 7, will offer the "Design and Construction Guidance for Safe Rooms", a free workshop. This 1-day training course (two half days) presents planning, design, and construction of safe rooms for tornadoes and hurricanes using FEMA P-361, "Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms (2021)." Approved for 7 CECs (Self-reported).

**Virtual Training on October 21st and 22nd from 9:00 a.m. - 1:00 p.m.**

**Inspecting Violations and Giving Notices**
This free class is designed for floodplain managers and community officials responsible for enforcing floodplain management regulations. We will watch a recording that will focus on investigating alleged violations and sending notices to property owners. There will be a live Q and A session at the end. This class has been approved for 1 hour of Continuing Education Credit (CEC) toward the Certified Floodplain Manager (CFM).

**Virtual Training on October 25th, 2021, from 11:00 a.m.—12:00 p.m.**

**Meeting with Violators and Resolving Issues**
This free class is designed for floodplain managers and community officials responsible for enforcing floodplain management regulations. We will watch a recording of the course that will focus on meeting with violators and resolving matters. Resolution may include going to court. The recording will be paused to provide updated Risk Rating 2.0 information and skip the outdated insurance information. There will be a live Q and A session at the end. This class has been approved for 1 hour of Continuing Education Credit (CEC) toward the Certified Floodplain Manager (CFM).

**Virtual Training on October 26, 2021, from 11:00 a.m.—12:00 p.m. Kansas Quick Guide**
This is a basic level course, covering the Kansas 2019 Quick Guide. We will watch a recording that covers over each topic covered in the booklet. It will touch on the many aspects of floodplain management. The recording will be paused to provide updated Risk Rating 2.0 information and skip the outdated insurance information. There will be a live Q and A session at the end. This class has been approved for 1 hour of Continuing Education Credit (CEC) toward the Certified Floodplain Manager (CFM).

**Virtual Training on November 2nd, 2021, from 10:00—11:00 a.m.**

**Elevation Certificates: Section A, Section B, Sections C, D, and E**
This class is for officials responsible for reviewing elevation certificates and surveyors who complete the forms. The focus is on section A, B, C, D, and E of the elevation certificate forms. This class has been approved for 1 hour of Continuing Education Credit (CEC) toward the Certified Floodplain Manager (CFM).

**Virtual Training on November 8th, 9th, 10th, 2021, from 1:00 p.m. – 2:00 p.m.**

**LOMA and LOMR-F Part 1 and 2**
This class compares LOMA and LOMR-F and completion of the forms. Part 1 focuses on the LOMA, Part 2 on the LOMR-F. This class has been approved for 1 hour of Continuing Education Credit (CEC) toward the Certified Floodplain Manager (CFM).

**Virtual training on November 29th and 30th, 2021, from 11:00 p.m.—12:00 p.m.**

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Find more information about floodplain management from Kansas Department of Agriculture Division of Water Resources online at:

http://agriculture.ks.gov/divisions-programs/dwr/floodplain

Email saves money on postage. The electronic newsletter also has links and the photos are in color. In the case that you are getting this newsletter by postal mail and would prefer email please contact Cheyenne Sun Eagle at: cheyenne.suneagle@ks.gov.

To find and register for upcoming training, as well as recordings of previous trainings, please see our new Floodplain Management Training webpage at:

https://agriculture.ks.gov/divisions-programs/dwr/floodplain/training
Kansas Department of Agriculture  
Division of Water Resources  
Floodplain Program  
Training Registration Form

Name ____________________________________________________________

Title ____________________________________________________________

Organization ______________________________________________________

Address __________________________________________________________

City __________________________ State __________________________ Zip ________________

Telephone __________________________ Fax __________________________

E-mail ____________________________________________________________

Name, date and location of training you will attend ______________________

____________________________________________________________________

*Please share this invitation with anyone else who could benefit from the training.

**Classroom locations will be sent to registered participants one week before the training.

**To find and register for upcoming training, as well as recordings of previous trainings, please see our new Floodplain Management Training webpage at: https://agriculture.ks.gov/divisions-programs/dwr/floodplain/training

** Any individual with a disability may request accommodation in order to participate in training. Persons who require special accommodations must make their needs known at least five working days prior to training. For more information, including special accommodations, please contact Cheyenne Sun Eagle at 785-296-0854 or by email Cheyenne.Suneagle@ks.gov.

Please scan and email your registration to: cheyenne.suneagle@ks.gov

Or mail to:

KANSAS DEPARTMENT OF AGRICULTURE  
FLOODPLAIN MANAGEMENT PROGRAM  
1131 SW Winding Road, Suite 400  
TOPEKA, KS  66615

For questions about training, please contact Cheyenne Sun Eagle by email at cheyenne.suneagle@ks.gov or by phone at 785-296-0854. You may also contact Steve Samuelson by email at steve.samuelson@ks.gov or by phone at 785-296-4622.
Please help us keep our records current. If the name that appears on this newsletter is for an individual no longer with your organization, please call 785-296-0854 or email cheyenne.suneagle@ks.gov to report the change.

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Kansas Association For Floodplain Management Conference in Lawrence
The 2022 KAFM Conference will be September 7-8, at the Double Tree by Hilton in Lawrence, Kansas.

Association of State Floodplain Managers 2022 Conference in Orlando
The 2022 ASFPM Conference will be May 15-19, at the Caribe Royale Orlando Hotel in Orlando, Florida.